



SUITS

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SUMP Guidance on Social Impact Assessment

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THE CIVITAS INITIATIVE IS CO-FINANCED BY
THE EUROPEAN UNION

- Introduction to SUITS
- Social Impact assessment
- Transport, new mobilities and quality of life
- Examples of SIA factors linked to transport measures in SUITS
- SIA and SUMP

Our cities



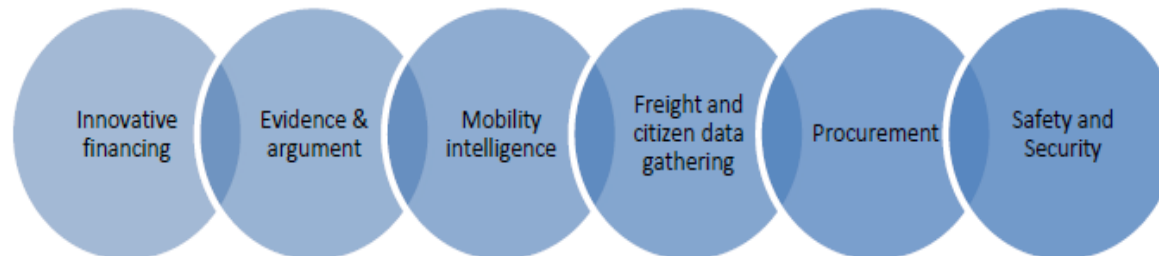
Geographic distribution and the team



Overview of project

The overall aim of SUITS is to increase the capacity of S-M local authorities to develop and implement sustainable, inclusive, integrated and accessible transport strategies, policies, technologies, practices, procedures, tools, measures and intelligent transport systems that recognize the end-to-end travel experiences of all users and freight.

This will be achieved by taking a sociotechnical, approach to addressing capacity shortfalls in t 6 areas



What are Social Impacts of Transport

“...changes in transport sources that (might) positively or negatively influence the preferences, well-being, behaviour or perception of individuals, groups, social categories and society in general (in the future). “

Guers et al (2009)

These can be:

- distributed
- cumulative
- discriminatory

Social Impact Assessment



Who is vulnerable?



Why is it important: equity

Linked to equity (Litman, 2010)

- Horizontal equity - no one individual or social group should be favoured more than others.
- Vertical equality with respect to social class and income refers to the idea of differentiating resources according to purchasing capacity.
 - An individual or social group, which is at a disadvantage, should receive more opportunities and resources in a progressive system, but will be overburdened in a regressive system.
- Vertical equality with regards to transportation ability and need, focuses more on individuals' physical ability and access to transportation modes, rather than their socio-economic conditions.
 - SIA could help to redress this

How is it measured; Lack of standardisation

- CBA focus on direct, quantifiable benefits. However, not all effects can easily be monetarised, and there is bias towards those which can
- MCA enables the simultaneous quantitative and qualitative impact of the achievement of some objectives, not necessarily in monetary terms. Its main advantage is that it can allow for more holistic evaluations through a more participatory approach



‘Standard’ considerations of SIA eg used in WebTAG

- **Accidents**
- **Physical activity**
- **Security**
- **Severance**
- **Journey quality**
- **Option and non use values ie ability to pay**
- **Accessibility – availability of transport, cost, location of essential services and activities, safety and security, travel horizons**
- **Personal affordability**

Assessed from perspective of

- **Transport users**
- **People living in areas that are effected by the measures even if they are not users**
- **Travellers to affected by intervention**

Example outputs

	Distributional impact of income deprivation					Are the impacts distributed evenly?	Key impacts - Qualitative statements (example below)
	0-20%	20-40%	40-60%	60-80%	80-100%		
User benefits	✓	✓✓	✓✓	✓✓	✓✓✓	No	Although benefits are felt by all income quintiles, the benefits favour those in the least deprived income quintiles. Those in the least deprived income quintile (income quintile 5) experience a considerably higher than expected proportion of benefits, whereas those in the most deprived areas (quintile 1) experience a smaller than expected proportion of benefits.
Noise	xxx	✓	✓✓✓	✓✓	✓✓✓	No	Noise impacts favour those in the least deprived income quintiles. Those in the most deprived income quintile experience noise disbenefits, whereas all other income quintiles experience benefits of the intervention.
Air quality	✓✓✓	✓✓	✓	xx	✓	No	Air quality impacts favour residents in the most deprived income quintiles. Those in the most deprived income quintile (quintile 1) that may be considered to be the most vulnerable experience a considerably higher proportion of air quality benefits than may be expected from an even distribution. Residents living in income quintile 4 experience air quality disbenefits.
Affordability	xx	x	xx	✓	✓✓	No	Personal affordability benefits favour those in the least deprived income quintiles. Those in income quintiles 4 and 5 experience benefits in terms of affordability, whereas those in the least deprived income quintiles (who may be the most vulnerable) experience disbenefits as a result of the intervention.
Accessibility	x	x	x	x	x	Yes	Accessibility impacts are appraised as slight adverse for all of the income deprivation quintiles and therefore although the impact is adverse the impact is distributed evenly.

	AST entry										
Impact	Social groups						User groups				Qualitative statement (including any impact on residential population AND identified amenities)
	Children & young people	Older people	Carers	Women	Disabled	BME	Pedestrians	Cyclists	Motor- cyclists	Young male drivers	
Noise	xx										
Air Quality	✓✓										
Accidents	✓	✓✓✓					✓	✓	✓	✓	
Security	✓✓	✓		✓✓							
Severance	x	x	x		x						
Accessibility	✓	x	x	✓	✓	✓					

Criticised (SUSTRANS, 2014) due to gaps in

- value placed on cycling and walking in optimising transport and economic performance, in terms of
- job creation,
- business growth (start-ups and increasing turnover, productivity gains),
- economic diversification,
- place competitiveness (including place branding, employment land, infrastructure, property, visitor economy, tourism offer),
- skills and employability (notably helping the unemployed and those at risk of unemployment, helping individuals access employment),
- economic resilience (local economy's ability to withstand shocks, risk mitigation, economic diversification, energy and resource efficiency and security, climate change).
- children, wellbeing, social inclusion, and leisure and tourism.

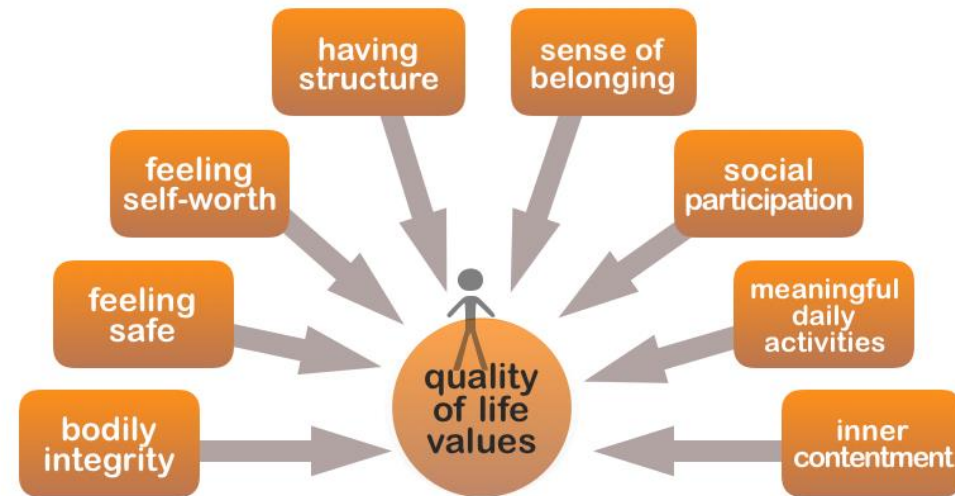
Why is it important: evidence based decision making

- Move from narrow to wider considerations eg aesthetics and quality of life
- Not all evidence is quantifiable or about money
- EBD should include a wider range of factors when assessing urban transport measures
- This promotes soft measures or innovative projects, whose costs and benefits lie predominantly beyond direct economic effects
- Transport can be innovative, inclusive and groundbreaking in its approaches



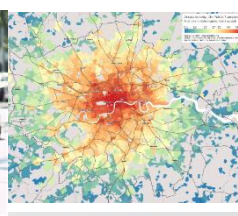
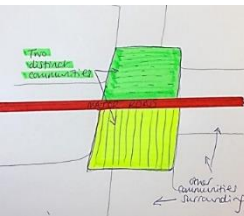
New mobilities and quality of life

- The role of transport and mobility in addressing social disadvantage and promoting equity
- Consideration of factors related to quality of life and livability



What could be measured

- Casualties and injuries
- Noise and nuisance levels
- Air pollutions/air quality
- Accessibility
- Personal safety and security
- Community severance
- Forced relocation
- Uncertainty of construction
- Visual quality
- Physical fitness levels
- Affordability
- Property values
- Landscape
- Heritage
- Safety and security
- Travel time
- Streetscape
- Journey ambience
- Distribution of impacts



Effectiveness of SIA limited by

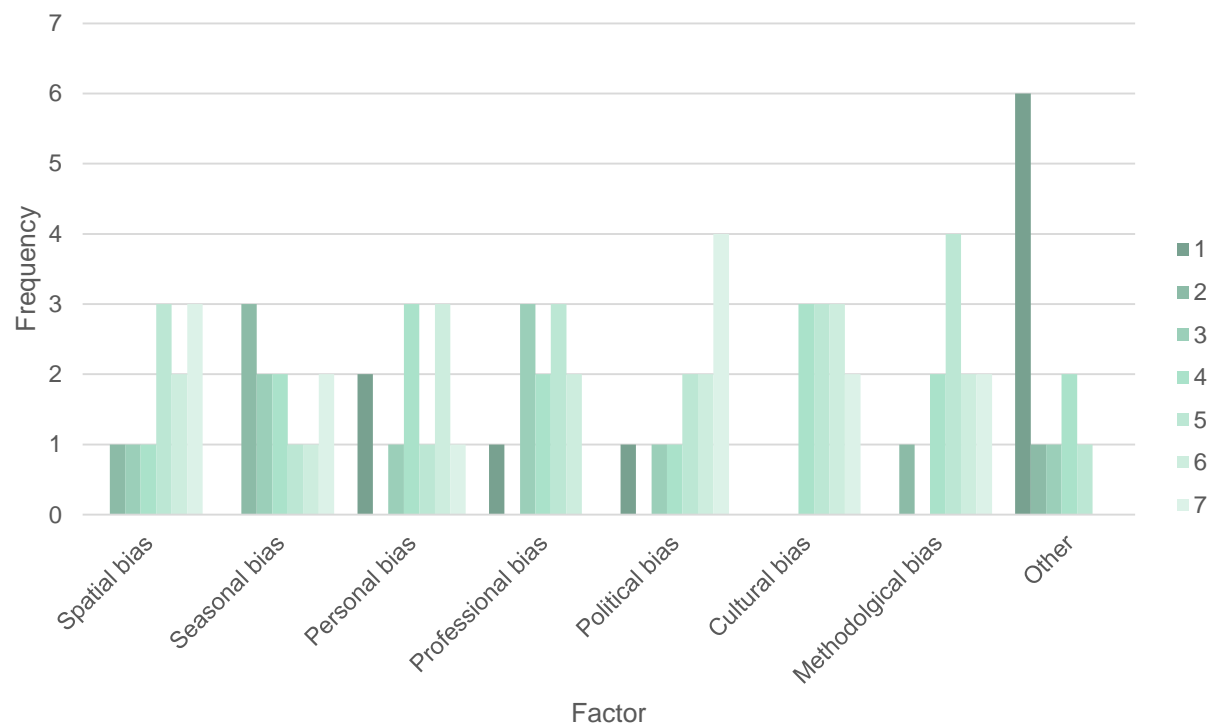
1. Lack of depth

1. Assess importance of different routes and technologies
2. Include environmental impact, economic assessment, land use planning
3. Better management and resourcing for ex ante SIAs to understand potential impacts with envisioning over long time periods

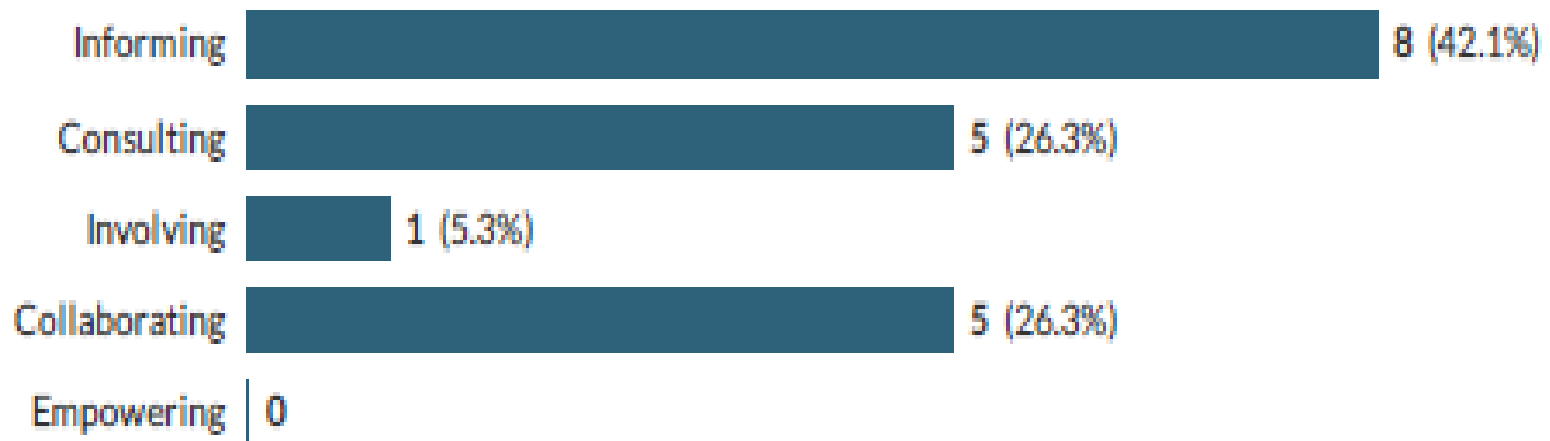
2. Process issues

1. Co-operation and flow of information
2. Need for wider consultation with all who are going to be effective
3. Need for continual meaningful engagement and feedback
4. Link it to social inclusion
5. Make tools simple and easy to use

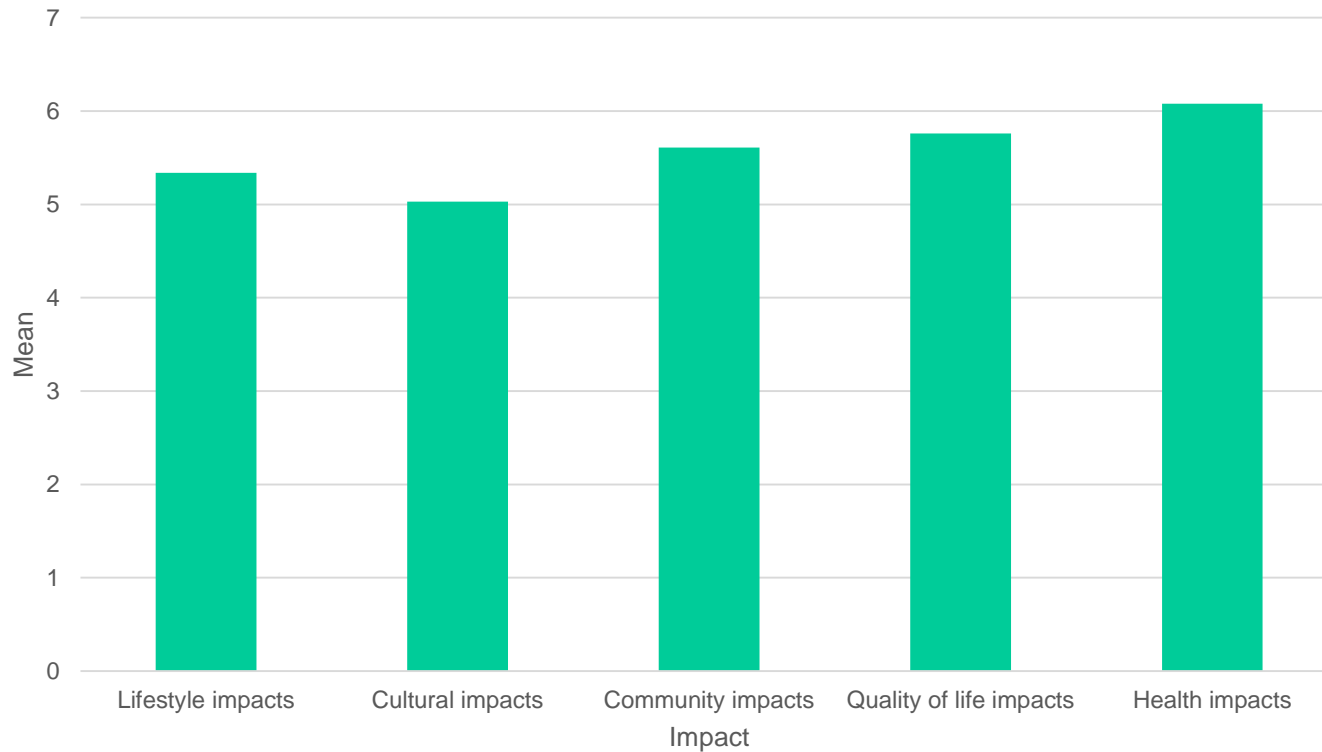
External factors limiting effectiveness



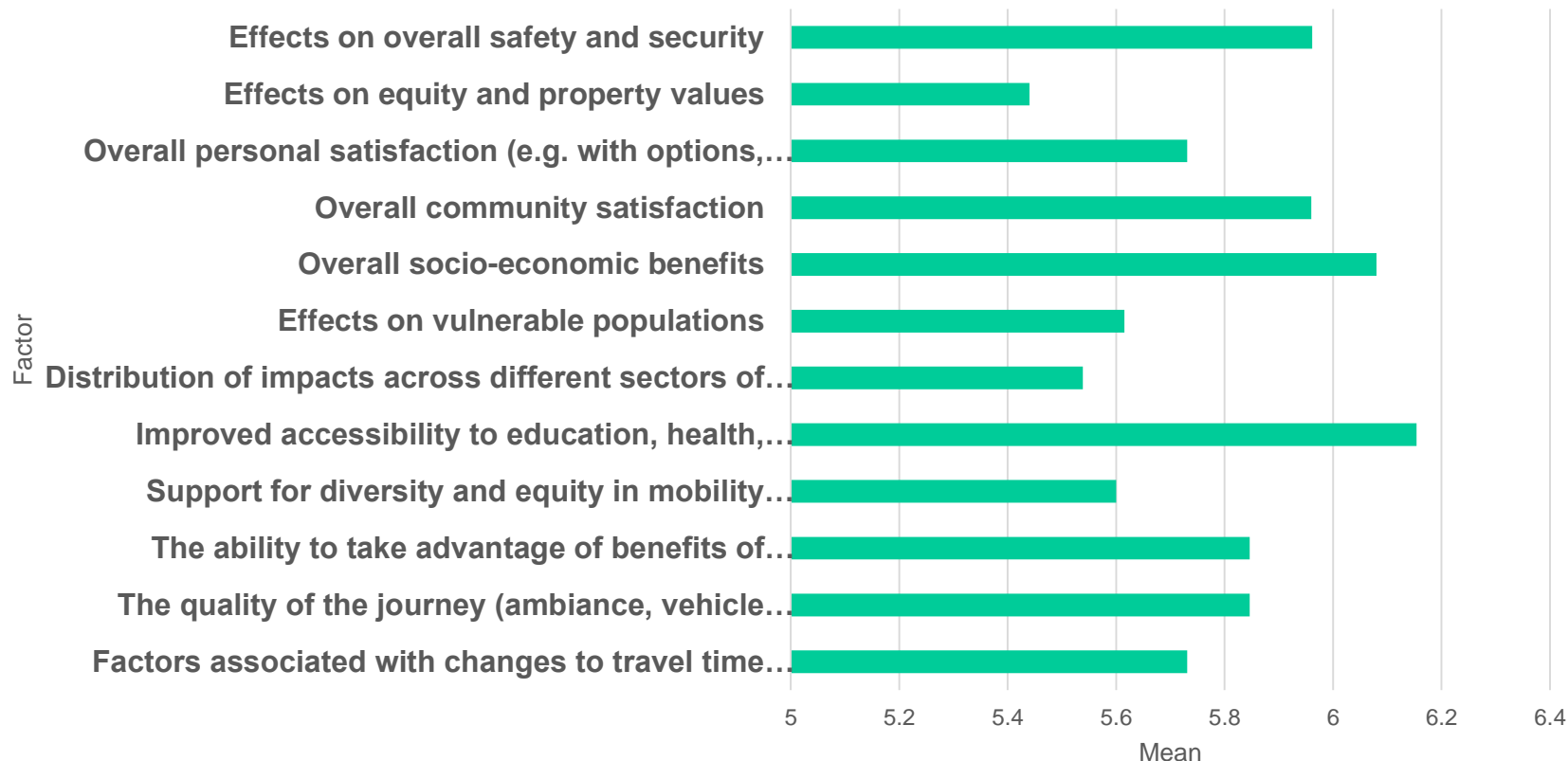
Current level of citizen engagement



Factors to be included

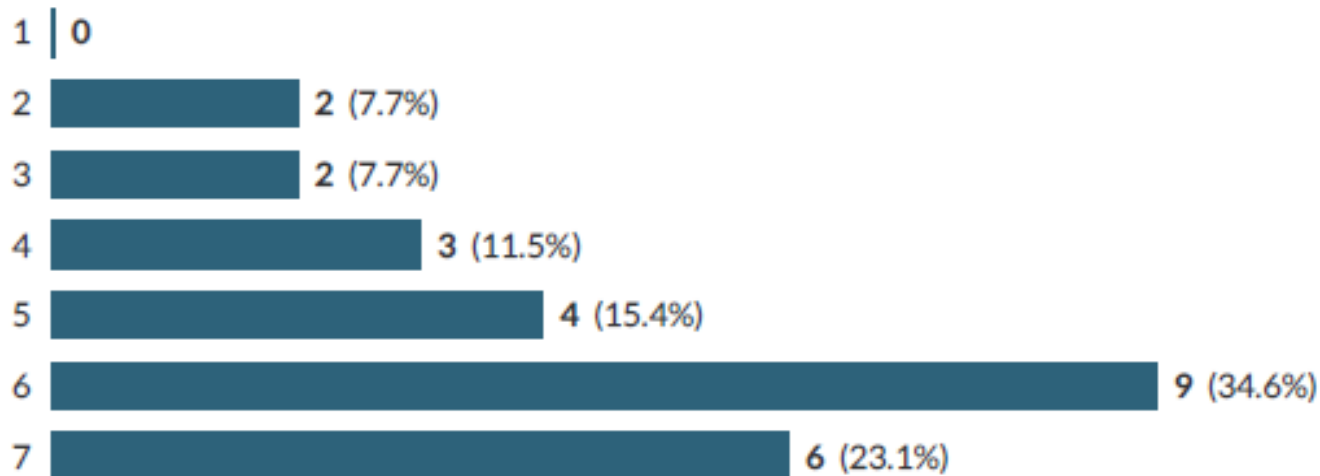


Liveability and quality of life factors

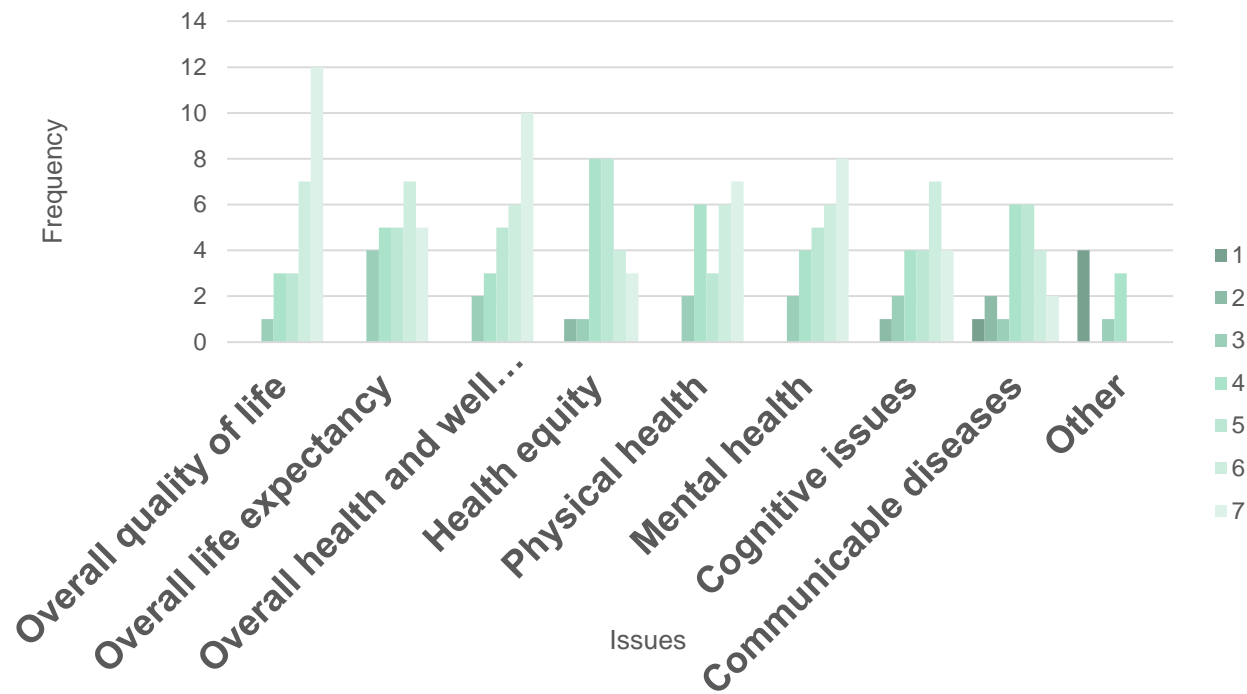


Some support for more holistic approach

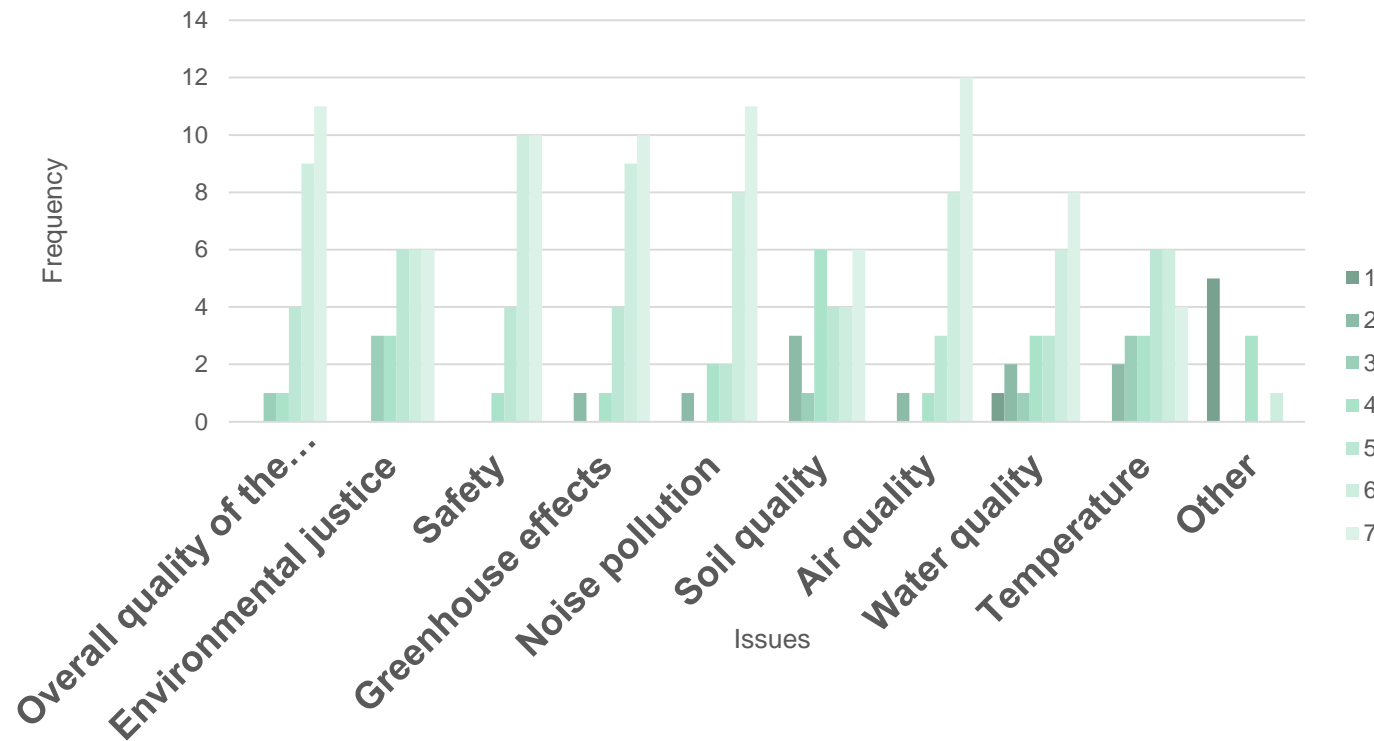
- Combining social, health and environmental impacts



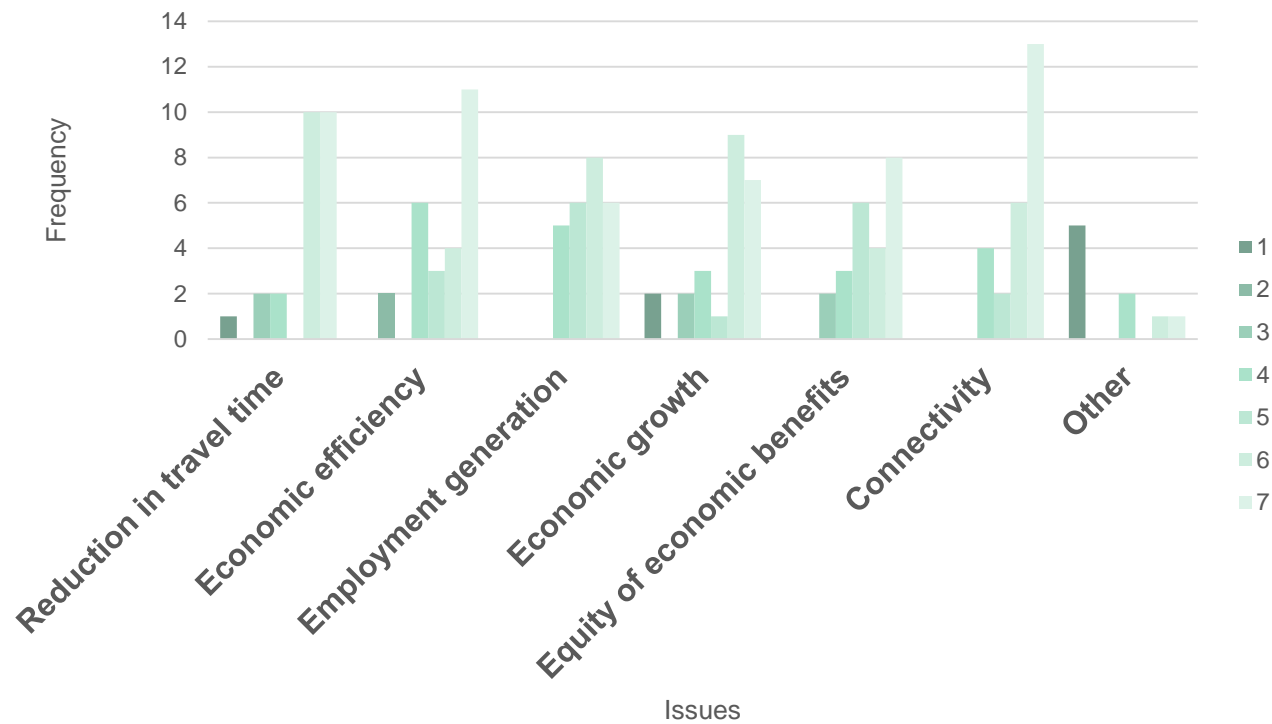
Heath issues



Environmental issues



Economic issues



CBA

- Gave full and meaningful outcomes
- A reliable and precise method
- The impact on skills and capacities require longer time to be shown - CBA could not identify and assess accurately the long term benefits
- CBA too time consuming and tricky to use to evaluate SIA aspects, assuming data is even available

MCA

- Decision making tool to find the best solution
- Confirmation of the association between socio-economic, demographic and geographic factors using advanced statistical techniques.
- Varied assessment criteria
- Means of studying holistic criteria
- A method that involves decision makers in the process, unlike CBA that is totally delegated to technical people.

- The SUITS project works with city partners in the development of transport measures, of different scales relating to
 - Mobility management
 - Safety and security
 - Information systems and services
 - Clean fuels and low emission vehicles
 - Collective passenger transport
 - SUMP measures
 - Freight

Rome: Safety and Security

- Measurement of safety and security for vulnerable people, the quality of public transport experience, pedestrian facilities
- Vulnerable users evaluation in term of road safety, through yearly accidents analysis considered social cost calculations for all victims involved in road accidents
- Understanding of transport perceived quality, survey of over 6000
- For traffic calming measures, realization of pedestrian areas and pathways consideration was given to improved urban liveability, safe spaces for social encounters, reduction of environmental pollution and promotion of active mobility



Kalamaria: Safety and security

- Pedestrian facilities (for instance smart pedestrian crossings) used MCA after implementation
- **Social Issues** Increased level of satisfaction for vulnerable road users, improved severance through installation of smart pedestrian crossings
- **Environmental issues:** Pedestrian safety improvement
- **Economic issues** related to economic benefits of promoting physical activity
- **Health issues** considered decrease in number of accidents, injuries



Kalamaria: SUMP measures

- Data to support development pilot implementation of an integrated parking study and bike sharing scheme of 150 parking- slots system at 3 roads, campaigns during the European mobility week in Kalamaria. MCA was used after implementation.
- **Social issues** awareness and better use of free space, awareness of sustainable urban mobility issues.
- **Environmental issues** considered reduction of emission of CO₂, reduction of pollutant emissions (tons / year of CO, NO,PM, lead), improved energy consumption:
- **Economic issues** related to economic efficiency, reduction in travel time, economic growth, income that could further be used to install another parking area
- **Health issues** considered decrease in number of accidents , injuries

Kalamaria: Freight measures

- Extension and improvement of routing for freight
- Development of an on line tool
 - Social issues considered better accessibility, better journey quality
 - Environmental issues: Reduction of pollutant emissions (CO₂, NO, lead, PM), greenhouse effect (reduction of emission of CO₂)
 - Economic issues related to reduced congestion and traffic in the area will improve fuel economy for motorists who regularly travel through the improved routing
 - Health issues considered decrease in number of accidents, injuries due to reduced traffic

Coventry: Safety and security

- Various measures to improve safety at crossings: Nearside pedestrian indicators (flashing red man / green man) buttons rather than far-sided; Assisted crossing app in development audio and visual cues for vulnerable road users. Pre and post evaluation was conducted by road safety team
- **Social Issues** Improved road safety and provide safe environment for all user groups and residents.
- **Environmental issues;** Controlled movement of pedestrians and traffic by not having the traffic constantly stopping and starting.
- **Economic issues;** Reduce incidents and accidents – and resulting costs
- **Health issues:** Reduce carbon emissions by improving traffic flows by reducing congestion at key crossing points.

Coventry: initiatives



Coventry: Information systems and services

- Accessible information portal providing web based access to transport data, gamification etc
- VMS Signs across ringroad for example.
- Wayfinding Totems across city centre e.g. tourist info
- **Social issues** Totems with large touchscreen displays to help pedestrians find useful information about the city, maps, activities and places to go.
- **Environmental issues** VMS signs to promote 'peak spreading' or 'load sharing' principles whereby the strain of traffic was spread equally across the three test corridors using innovative technology
- **Economic issues** City first in Europe to unveil Wayfinding touchscreens providing maps and information via an interactive 'cloud' or keyboard search.
- **Health issues** Reduced congestion as a result of variable messaging based on live conditions should have an effect on numbers of accidents and incidents plus reduced emissions hopefully



Coventry: Clean fuels and low emission vehicles

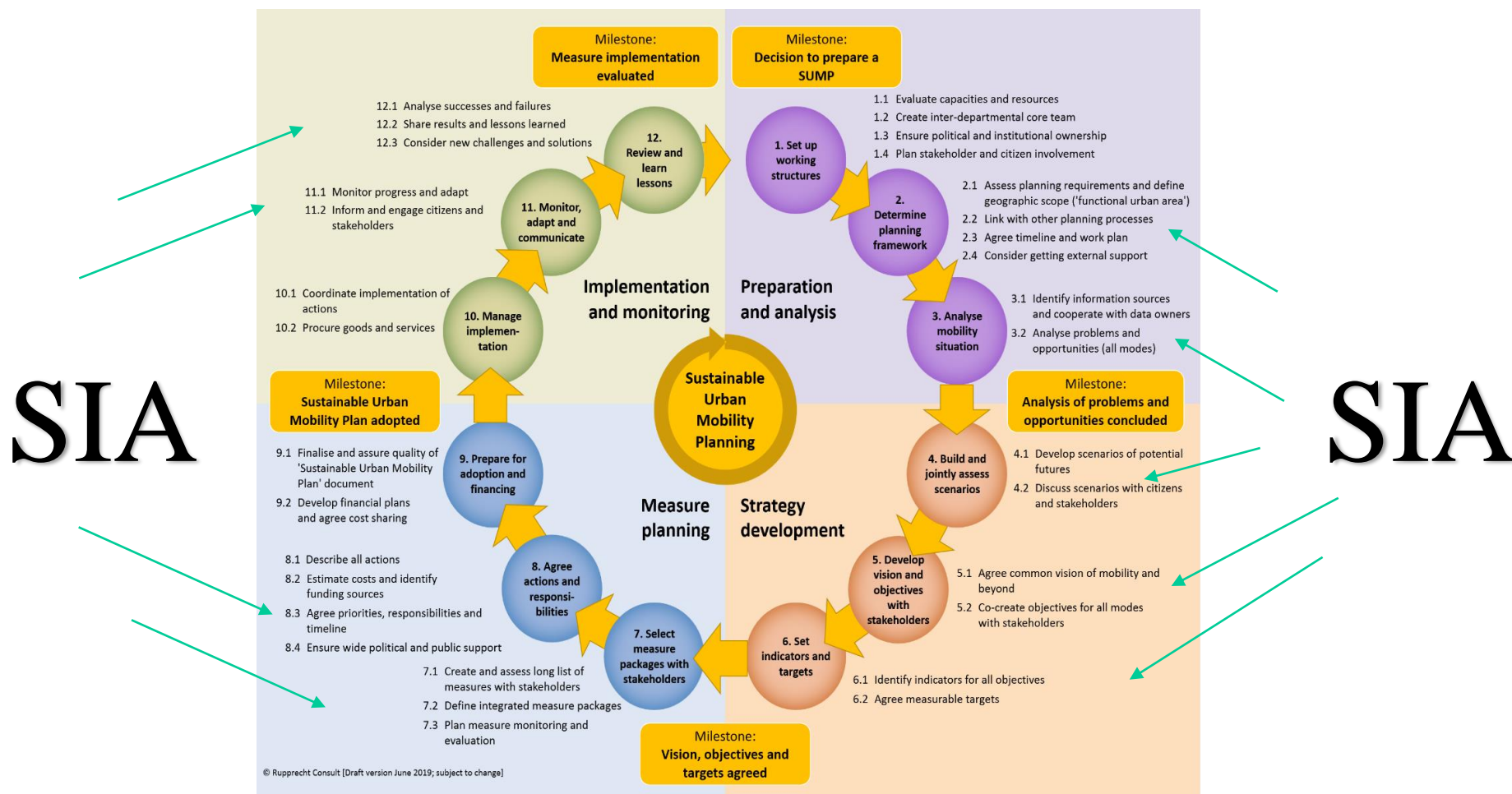
- Greening the grey fleet
- Retrofitting of buses
- Council initiatives include a switch to hybrid fleet of pool cars, car sharing, development of electric taxis in talks, investigating retrofitting viable housing estates with EV charging infrastructure, early measures project through DEFRA to address government emissions targets and EU targets through identification of city hotspots, UK Autodrive project includes LSATS vehicles (Light Speed Autonomous Transit Systems) which aim to test and rollout a fleet of autonomous electric pods in pedestrianised environments (e.g. last mile / leg solution as part of a multi modal journey).
- **Environmental issues** Low carbon, air quality, DEFRA National air quality objectives; European Directive target values for the protection of human health.
- **Economic issues** Internet of things, connectivity, autonomy, living lab – attracting investors, funders, researchers and visitors. City of Culture presents economic opportunities for the region too.
- **Health issues** Reduced emissions hopefully

Transport's role in the future



- Markovich and Lucas (2011) concluded that a focus on the social and distributional impacts of transport presented an opportunity to 'ensure a more socially just system of transport spending and delivery in this decade and beyond'.
- Consideration of wider impacts means that SUMP's and transport measures do not work in isolation
- Transport working for the people

Where does it fit into SUMP cycle



References

- Geurs, K.T., Haaijer, R., and van Wee, B. (2006) The option value of public transport: methodology for measurement and case study for regional rail links in the Netherlands. *Transport Reviews* 26(5), pp 613-643.
- Litman, T. (2010) *Evaluating Transportation Equity Guidance For Incorporating Distributional Impacts in Transportation Planning*, Victoria Transport Policy Institute
- Markovich, J. and Lucas, K. (2011), The Social and Distributional Impacts of Transport: A Literature Review Working Paper No,1055 August 2011 Transport Studies Unit, School of Geography and the Environment.
- Woodcock, A. (2018) : Social Impact Survey, D7.3, SUITS

More information available

SUITS: Policy Note 2
Forthcoming SUMP 2.0 Practitioner briefing

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